

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-14. (canceled).

15. (currently amended) A system for detecting the presence of an energetic material in a sample in which the presence of the energetic material is unknown, the system comprising:

a thermal measuring apparatus which during operation heats the sample and measures heat flow between the sample and its surrounding environment; and

an analyzer coupled to the thermal measuring apparatus and comprising a processor and software, wherein the software causes the processor to analyze which during operation analyzes the heat flow measured by the thermal measuring apparatus and to determines determine the presence or absence of a strong exothermal peak, wherein the presence of a strong exothermal peak indicates the presence of the energetic material in the sample and the absence of a strong exothermal peak indicates the absence of any energetic material in the sample.

16. (original) The system of claim 15, wherein the thermal measuring apparatus is a differential scanning calorimeter.

17. (original) The system of claim 15, further comprising a collection apparatus that collects and concentrates the sample.

18. (original) The system of claim 17, wherein the collection apparatus collects and concentrates the sample by electrostatic precipitation.

19. (original) The system of claim 17, wherein the collection apparatus collects and concentrates the sample by solvent extraction.

20. (original) The system of claim 15, wherein the thermal measuring apparatus heats the sample in a substantially anaerobic environment.

21. (original) The system of claim 15, wherein the thermal measuring apparatus heats the sample to a temperature no greater than about 500°C.

22. (original) The system of claim 15, wherein the thermal measuring apparatus heats the sample to a temperature no greater than about 350°C.

23 - 29. (canceled)

30 (new) The system of claim 15, further comprising an alarm or display activated by the analyzer when a strong exothermal peak is identified to signal the presence of an energetic material.